

$$f_k = [2, 5, -7, 2, 3, -1, 9, 0]$$

$$f_e = [2, -7, 3, 9]$$

$$f_o = [5, 2, -1, 0]$$

$$\begin{aligned} H_n &= \sum_{k=0}^{N-1} f_k \exp\left(\frac{2\pi i k n}{N}\right) \\ &= \sum_{k=0}^{N/2-1} \exp\left(\frac{2\pi i k n}{N/2}\right) f_{2k} + \omega^N \sum_{k=0}^{N/2-1} \exp\left(\frac{2\pi i k n}{N/2}\right) f_{2k+1} \end{aligned}$$

$$H_0 = 13$$

$$H_1 = 1,83 + 10,3i$$

$$H_2 = 3 - 2i$$

$$H_3 = -3,8 - 21,7i$$

$$H_4 = 1$$

$$H_5 = -3,8 + 21,7i$$

$$H_6 = 3 + 2i$$

$$H_7 = 1,83 - 10,3i$$